

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002364**Date Inspected:** 17-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coating Inspection**Bridge No:** 34-0006**Component:** Lift 1 West, Sub-Assemblies, Lift 1 East, OB**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Office**

Attend to project files and documentation. Also ABF satellite office review and sign Notices of Inspection and ZPMC QC reports.

**ONG 8AE**

Base Metal surfaces of the external Top Plate, Side Plates, Bottom Plate and FL-3 Beams were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Also the end Diaphragm was abrasive blasted and undercoated as well as the Upper "U" Rib Stiffeners.

**Sub-Assemblies**

Previously coated Splice Plates Cover Plates for Chevron Assemblies, and Drip edge rails were returned from Trial Assembly area for repairs to damaged undercoat. Surfaces were abrasive blasted to Base Metal and an SSPC SP-10 re-established and Interzinc 22 undercoat was applied to amend repairs.

**Lift 1 East**

Repairs were performed to the internal transverse Weld Seam in accordance with the agreed upon method and Interzinc 52 undercoat applied from Panel Points 10-11. Also concurrent with this work repairs were in process to undercoated areas which exhibited over-blast damages from Panel Points 12-13 in the Ceiling area of the "U" Rib Stiffeners.

**Lift 2 West**

---

## SOURCE INSPECTION REPORT

( Continued Page 2 of 2 )

---

Internal repairs to damaged areas of the Bottom and Side Plates “T” Stiffeners and Upper Corner Units as well as the Lower Chevron Assemblies were found to be in general compliance with the contract documents. During the inspection process touch up was performed as defective areas were discovered by Caltrans QA Lumley and ABF personnel. Work was performed from End Weld Seam to End Weld Seam from Panel Points 13-18. ZPMC to transport to ship #17 and load and affix Sea Fasteners.

### OBG 8AE

External surfaces were found to require minor re-abrasive blasting above FL-3 Cross Beam termination which were left uncoated and Rust Back had occurred. SSPC SP-10 was re-established to the Base Metal and Interzinc 22 undercoat was applied.

### Lift 1 East

ZPMC requested a “Final” inspection of the Upper “U” Rib Stiffeners and FL 2-1 Beams and Upper Chevron Assemblies from Panel Point 8.5-13 areas exhibited that the repairs were incomplete at time of inspection and ZPMC personnel were still in process of coating application. Repairs are still required and ZPMC is to re-submit Notice of Inspection after ZPMC QC personnel have affected repairs.

### Lift 1 West

Base Metal surfaces of the area to be embedded in concrete and which had visible rust and corrosion evident were re-abrasive blasted to an SSPC SP-10 condition and Intercure 200 HS re-applied. All areas were at the top edge along the upper weld seam and approximately ½ meter in length by 150mm width, a total of 6 locations required repairs.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Discussed with ABF Bill Oak ZPMC QC personnel and what their roles were for repairs to damaged areas and why ZPMC QC was unable to recognize the areas of concern to be repaired.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

---